桶形移位器Barrel shifter测试结果记录表

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **移位类型** | **Carry\_flag** | **SHIFT\_OP** | **移位次数**Shift\_Num | **被移位数据**  Shift\_Data | **输出数据Shift\_Out** | **移位进位Shift\_Carry\_Out** |
| 逻辑左移lsl | 0 | 00x | 1 | 0x80000000 | 0x00000000 | 1 |
| 0 | 00x | 0 | 0xffffffff | 0xffffffff | NONE |
| 0 | 00x | 32 | 0xffffffff | 0x00000000 | 1 |
| 逻辑右移lsr | 0 | 010 | 1 | 0x00000001 | 0x00000000 | 1 |
| 0 | 010 | 31 | 0x80000000 | 0x00000001 | 0 |
| 0 | 010 | 0 | 0xffffffff | 0x00000000 | 1 |
| 0 | 011 | 0 | 0xffffffff | 0xffffffff | NONE |
| 0 | 011 | 1 | 0x00000001 | 0x00000000 | 1 |
| 0 | 011 | 32 | 0xffffffff | 0x0000000 | 1 |
| 算术右移asr | 0 | 100 | 0 | 0xffffffff | 0xffffffff | 1 |
| 0 | 101 | 0 | 0xffffffff | 0xffffffff | NONE |
| 0 | 101 | 1 | 0x80000000 | 0xc0000000 | 0 |
| 0 | 101 | 32 | 0x80000000 | 0xffffffff | 1 |
| （带扩展）循环右移  rrx/ror | 0 | 110 | 0 | 0x80000000 | 0x40000000 | 1 |
| 0 | 111 | 0 | ox80000000 | 0x80000000 | NONE |
| 0 | 111 | 1 | 0x00000001 | 0x80000000 | 1 |
| 0 | 111 | 33 | 0x80000000 | 0xc0000000 | 0 |